“Parental Attunement:
Sharing Companionship”
(as with an intelligent, creative and affectionate person)
Prof. Colwyn Trevarthen,
Department of Psychology, University of Edinburgh, Scotland

The Michael Sieff Foundation Conference
From Conception to Reception: Early Years Intervention
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HUMAN EXPERIENCE IS TO BE SHARED WITH AFFECTION
We try to tell our intentions, interests and feelings
by moving in sympathy -- creating stories of life
with people we know, from birth.

A new, positive, psychology of infancy accepts that our
minds are born for sharing interests, intentions and
feelings, by moving in sympathy -- in brain time.

Human brains are motivated to express mind states as body
movements, and to communicate in the rhythm of common
sense, called intersubjectivity by psychologists.

We communicate motives and sympathetic feelings from
the beginning of life, making sense of mutual experience,
with the affectionate attention of favourite companions.

This sharing is the foundation of mental health,
therapy and all learning and education, from birth.
We must understand it better, and respect it.

A proud, healthy family in a remote forest in Canada in the 19th Century

INDIVIDUAL SUBJECTIVITY --
DOING AND KNOWING
To be a Subject means to be alive in your body and to
know what you are doing.

To be a happy subject means to feel sure you can do it
by acting with rhythmic flowing ease, sensing the
pleasure of knowing what will happen and how it will
feel, learning new actions and experiences.

All infants are clever and sensitive subjects from birth.
And they are especially active and happy with
responsive Others.

INTERSUBJECTIVITY AND MEANING
Intersubjectivity means being alive with Others, doing
things you and they understand, together, with mutual
attention and respect.

We enjoy knowing what makes sense to Others,
exploring joint actions, discovering the same surprises,
sharing rituals, making plans and creations together,
participating in jobs that need more than one pair of
hands, cooperating. This is a way to help persons in
distress.

We learn and grow, from infancy, by intent participation
in meaningful activities and experiences.
INFANTS SEEK HUMAN COMPANY FROM BIRTH.
Step by step they develop ways to make their life effective with rich memories that can be shared.
After a few months they help make imaginative culture grow by learning and inventing rituals of play in games.
Before they can talk they try to follow the meanings of their community with moral emotions -- feeling pride in shared meaning, and shame if others do not understand what their stories and excitement mean.
One-year-olds eagerly cooperate in tasks, with common sense, using tools -- cups, books, 'phones and more -- accepting dolls as persons, and making fun with peers.

HOW INTERSUBJECTIVITY WORKS
(OR FAILS)
Intuitive stories about states of mind are passed between a mother and her baby even before birth, in movement. They have the same ‘language of rhythm’, so their minds can flow in sympathy, in a universal ‘mind time’.
If either is not listening, then the other one is lost -- you can only enjoy talking to yourself if you have company to think about, remembering what you found together, how it was valued together. We carry company in our minds.

"In healthy families, a baby forms a secure attachment with her parents as naturally as she breathes, eats, smiles and cries. This occurs easily because of her parents’ attuned interactions with her. Her parents notice her physiological/affective states and they respond to her sensitively and fully. Beyond simply meeting her unique needs, however, her parents “dance” with her. Hundreds of times, day after day, they dance with her."

"There are other families where the baby neither dances nor even hears the sound of any music. In these families she does not form such secure attachments. Rather, her task – her continuous ordeal – is to learn to live with parents who are little more than strangers. Babies who live with strangers do not live well or grow well."


Professor Vasudevi Reddy’s new book, on ‘second person psychology’
“How Infants Know Minds” Harvard University Press, 2008
“There are precious ideas here, well worth sharing with behavioral science, philosophy, anthropology and related disciplines” -- Jerome Bruner

VASU REDDY’S THREE ‘SOLUTIONS’ TO THE PROBLEM OF MIND, IN PSYCHOLOGY
S = Self; O = Object; P = Other Person
A child is formed to sense and regulate all three.
THE HUMAN BRAIN IS NOT MEANT TO MOVE FOR JUST ONE PERSON.

MOVING - FOR ONESELF
Intentions to move, and objects, are ‘felt’ by the Self,
and also shared.

BEING MOVED - WITH OTHERS
This sharing of the feeling and knowing of movement is what makes the creating of common sense possible.

MEANING - IN THE CULTURE
Sympathy for sharing meaning is a gift that must be nurtured in affectionate play, with fun, in good company.

HOW BRAINS EXPRESS INTEREST WITH AFFECTION
INTEREST
AFFECTION
KNOWING & DOING
HAVING FEELINGS

SYNRHYTHMIC REGULATION: Mother and infant communicate psychologically, regulating sympathy by expressions of emotion.

WHAT TIME IN THE MIND IS FOR: The Brain Thinks, Imagines and Remembers in Time, With the Rhythms of an Intrinsic Motive Pulse, the IMP -- and these rhythms communicate

Rhythmic movements result from predictive motor images generated in the brain to 'use' and 'feel' the forces of the periphery (Bernstein, 1967).

Pre-reaching 23 days after birth.
(A) Vertical displacement of the center of the wrist. Hand partly open at the climax of wrist displacement.
(B) Acceleration showing pulsing or stepping.
(C) Frequency histogram of intervals between falls of the wrist for 7 newborns has a main period of c. 300 msec.
(D) Successive postures while an infant tracks an object moving slowly to her left.
Rhythms of Scanning & Tracking By Moving Eyes

ONE INNATE RHYTHM OF THE MIND, 3/Second
Close to syllables, or fast walking.

Arm Lifts
Infants, 12-30 days

Eye Saccades
Infant, 9 days

Eye Saccades
Adult

0.3  0.6  0.9  1.2 SECONDS

Parasympathetic Heart Regulation
1/40 sec.
(Narrative Time of vital energy cycle)

THE INSIDE STORY GOES ON
WHEN YOU ARE ASLEEP,
AND THE SLOW RHYTHM
OF ITS DRAMA
CAN BE SHARED


THE BABY LEADS THE DANCE OF INTERSUBJECTIVITY
Jody, 9 weeks old, and his mother at the Center for Cognitive Studies, Harvard University, 1969

Research Project on Infant Communication with Prof. Jerome Bruner, Dr. T. Berry Brazelton and Dr. Martin Richards

Gestures, gesticulations and expressions.
6 week old baby girl.
Prespeech -- Movements that will make words

Newborn infants have expressive bodies

Intersubjective Chronobiology
The rhythms, expressive qualities and narrative making in movements of dialogues or 'protoconversations' with
2-month-old Laura in Edinburgh led to a theory of Communicative Musicality
How time and energy in moving communicates by sensing messages in the expressive vitality, or 'flow' of energy, in others' movements.

"Communicative Musicality: Exploring the Basis of Human Companionship"
Stephen Malloch and Colwyn Trevarthen
Oxford University Press 2008

The voice is a wonderful instrument of sympathy-- of shared feelings

The videos and sound recordings of this research are available on the following site.
http://www.st-andrews.ac.uk/soundanth/
Go to "programme" and search for Professor Colwyn Trevarthen, University of Edinburgh

"Analysing Musicality of Sound and Gesture in Communication with Infants: finding the pulse of sociability."

Stephen Malloch, a musician and acoustics expert, listened carefully to their Sounds of Affectionate Interest. He discovered the Communicative Musicality of Laura’s and her Mother’s Protoconversation -- a Story in Sound

First 10 seconds of a short 'story': 'Introduction'.

THE BODY SHOWS INTIMATE INTENTIONS
Laura, 6 weeks old, and her mother, Edinburgh University, 1979
Music communicates because it engages an Intrinsic Motive Pulse (IMP) in the brain. The sense of 'musicality' comprises:

1. **PULSE**: A rhythmic time sense (syllables, the beat, phrases and longer elements);
2. **QUALITY**: Sensitivity for the temporal variation in intensity, pitch and timbre of voices and of instruments that mimic the human voice;
3. **NARRATIVE**: Perception of the emotional development of the melodic line, which supports anticipation of repeating harmonies, phrases and emotional forms in a vocal or musical performance.

**COMMUNICATIVE MUSICALITY** (Malloch, 1999)

**Narrative**

- Pulse and Quality are combined in the forms of emotional narrative, which allow two persons to share a sense of purpose in passing time.
- We examine the musical companionship that is created with her baby as a mother shares a protoconversation or chants a nursery rhyme.
- We conclude that Communicative Musicality is vital for companionable communication between mother and infant.
- Stephen Malloch (1999)
**LANGUAGE**
What the Mother Says: A Different Layer of Communication With the Same Narrative Melody -- the Same Rhythmic Sense of Purpose in Time

<table>
<thead>
<tr>
<th>INTRODUCTION</th>
<th>DEVELOPMENT</th>
<th>CLIMAX</th>
<th>RESOLUTION</th>
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</table>
| 1 Come on    | Ooh yes!    | Tell me some more then | 17 Ch r  
| 2 Again      | To the right | *        | * ***      |
| 3 Come on then | That’s clever | **      | 16 Shy    |
| 4 Tell me some more then | Ooorrh | * *** | 17 Goo  |
| 5 Tell me some more then | Ooorrh | * *** | 17 Goo  |
| 6 ***        | Ooorrh      | * ***   | 17 Goo    |

**NEWBORNS ARE TALENTED PERFORMERS**

SEARCHING FOR SHARED EXPERIENCE BY ‘TALKING’ WITH HANDS, EYES, FACE AND VOICE

20 minutes old, and eagerly tracking a lively ball that someone is moving in a ‘game’.

![Image of a newborn tracking a ball](image)

NEONATAL IMITATION IS FOR TWO: Research of Dr. Emese Nagy in Szeged, Hungary, with Newborns

![Image of newborns interacting](image)

Dialogue with a baby less than 2 days old

![Graph of heart rate and imitation](image)
Looking at my own hand.

Whose hand is that?

... I better try to do that too (heart speeds up)

I wonder if I can ask her to do it for me. (heart slows)

That's right. Thank you!

The rhythms of speech are innate
Even a premature infant can share a conversation.
A video of Naseera, who was born 3 months premature, was made by Saskia van Rees in an ICU in Amsterdam. She makes videos of birth, neonatal care, communication with infants and children with special needs.
See her website: Saskia van Rees
Stichtinglichaamstaal (Body Language Foundation)
Secretariat: Scheyvenhofweg 12, 6093 PR Heythuysen, The Netherlands.
Internet: http://www.stichtinglichaamstaal.nl/
Email: info@stichtinglichaamstaal.nl/
Naseera, born 3 months early, kangarooing with father

WHEN THE RHYTHM OF VITALITY IS NOT SHARED, JOYFUL INTIMACY BECOMES DISTRESS

Babies detect when the rhythm is wrong. Then they express their sadness at loss of ‘contingency’ -- when ‘out of touch’ in the dance.

Research of Prof. Lynne Murray at Reading University, and Dr. Maya Gratier in Paris, has explored how the mother-infant dyad is affected when interpersonal timing is disturbed, experimentally, or by illness.

Depressed Mothers Lose Musicality

When they talk with their infants, sharing adventures in action and in thought is more difficult for both. The baby may be depressed, too.

The voice of an immature newborn
Naseera, 2 months premature, ‘kangarooing’ ‘chats’ with Father. Sharing time with vocal expression, and making up a ‘story’.

Lynne Murray’s Double Television Replay Test

Baby Shona, 8 Weeks, in one Room, Her Mother in Another. They See, and Hear, Each Other on Television
The happy minute of Shona’s mother is replayed.

Shona is out of touch, withdrawn, sad when mother is just a recording.

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GAMES & RITUALS, WITH PEOPLE AND WITH THINGS

Person-Person, with a performer’s pretence, then Person-Person-Object with ‘toys’.

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After 3 months, a baby quickly becomes stronger, more curious, eager to look at surroundings, and to grasp and manipulate things.

There is a growing tension between doing something for oneself, or with others -- and this makes for self-consciousness, teasing and fun, and invention of games.

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A mother and all the family become more lively. They start playing rhythmic body games, and enjoy music, songs and dancing which become part of the fun of their life together.

They are sharing their special rituals and dramas, feeling them intimately in their bodies and minds, and remembering them in a ‘proto-culture’
As they become more aware of what their bodies can do, infants love to be involved in action games with an other person.

Thus baby songs and nursery rhymes begin, in every society. The baby soon learns the rules of play, joining a poetic culture. Its tones, rhythms and melodies will help hearing sounds of speech and making sense of others’ gestures and actions, feeling the movements of their meaning.

The five-month old blind baby conducts the songs with her left hand. The baby’s hands move 1/3 second before the mother’s voice.

Research on songs for infants in many languages has taught us how we share story-telling beneath, or beyond, the spoken word -- in the body.

The infant's feelings can be mirrored and modified by song and instrumental music.

Responses to music prove that rhythm and melody catch a baby’s attention and move him or her to dancing in time with hands and legs.

Songs are quickly learned, and unforgettable, becoming favourite messages for companionship, and emblems of the infant's identity.

Leanne, 5 months. “Round and round the garden”, with Interest and Pleasure.

A FAVOURITE ACTION SONG

Round and round the gar-den,

Ran a ted-dy bear,

One step, two step,

Tic-kl-y un-der there.

A POPULAR SCOTTISH CLAPPING STORY

Clappa, clappa handies,

Mommy’s at the well,

Daddy’s away to Hamilton,

To buy wee Megan a bell.
Megan, 5 months, “Clappa-clappa-handies”

Emma, 6 months: Looking at self, touching Mother’s tongue
Her pride is marked by the circle

Clapping hands with shared joy; imitating, watching own tongue

Emma, 6 months: “Clap Handies!” (She is left-handed).

Emma, 6 months, On father’s knee.
Her mother says, “Clap handies!”
Emma ‘shows’ or ‘performs’ to the camera, with intent look and a proud grin.

(Photograph © John and Penelope Hubley, 1979)

That’s pride!

But, With a Stranger she is worried and ‘Ashamed’
-- He does not ‘get it’.
Even a nice stranger is hard for a 10-month-old to bear.

And Mother gets told off!

COOPERATING IN TASKS
TO SHARE MEANINGS OF CULTURE

A new initiative at 9 months -- a growth spurt of the prefrontal cortex?

Secondary Intersubjectivity & Sharing Tasks

At about 9 months important advances occur in sharing experience. The baby’s increased interest in what other people are doing and the things they use leads to following directive messages, trying to make conventional messages or to use objects ‘properly’ -- in the approved way. This is vital preparation for learning language to name meanings or conventions of ‘human sense’.

TWO ATTENTIONS to Object, or to Mother

“Put the man in the truck!”

Emma, 7 months. Is bright, but she doesn’t get her mother’s message. She is too young to share the purpose of a task.

“Don’t chew it. Put it in there!”

For Basilie, 12 months, it is easy and amusing.

“OK, If that’s what you want me to do.”

“Here, put this one in the truck!”
No problem!

“Happy?”

“Oh, what a clever girl!” (Yes I am good, aren’t I)

Basilie pointed and vocalised a ‘protolanguage’ request for the magazine. Her mother said, “Oh, she recognizes the National Geographic by its yellow cover, and likes to look at the pictures.”

Age-Related Developments in Body and Mind

A chart of the first 18 months after birth shows how advances in communication and self-awareness are related to developments in the body and movement, and also to changes in perception and cognitive abilities -- the growth of a creative human sociable intelligence.

Sharing meaningful things

How we have charted communication before language.

THE PROCESS BEGINS BEFORE BIRTH
Important transitions mark the development of sympathy for persons, games with playmates and things, cooperative awareness, and imitation of cultural meanings.

THESE TRANSITIONS ARE MARKED BY SO-CALLED ‘DIFFICULT PERIODS’ -- WHEN THE BABY’S MOTIVES CHANGE AND ARE MORE VULNERABLE
(As Many As 10 In the First 18 Months)
Dr. Berry Brazelton calls them ‘touch points’, opportunities to know the baby better.

Co-operative Awareness & Meaningful Tasks
After 9 months
Ritual Games & Pretence
After 3 months
Proto-conversations With Musicality
Birth to 3 months


CONCLUSION
Rituals of Culture express development of a child’s Self, a Social Identity with a developing Personal Narrative History, Motivated to find Meaning in a Human World.

Infants are not just bodies, emotionally dependant on mothering, and not just learning machines with cognitive brains and growing bodies.

Toddlers are not just pupils in society. They are persons with moral feelings who are creative of meaning by cooperating in pretend play that needs no spoken language.

Education in knowledge and skills must respect the child’s motives for sharing meaning, and therapies must engage with and support weak or confused, and ashamed, motives and feelings.